

RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical
Information Center (STIC) no errors detected.

Application Serial Number: 10/774,076 A
Source: IFW16
Date Processed by STIC: 8/23/06

ENTERED



IFW16

RAW SEQUENCE LISTING

DATE: 08/23/2006

PATENT APPLICATION: US/10/774,076A

TIME: 09:07:35

Input Set : A:\161USUT01.ST25.txt

Output Set: N:\CRF4\08232006\J774076A.raw

3 <110> APPLICANT: Landolfi, Nicholas
 4 Tsurushita, Naoya
 5 Hinton, Paul
 6 Kumar, Shankar
 8 <120> TITLE OF INVENTION: Amphiregulin Antibodies and Their Use to Treat Cancer and
 9 Psoriasis
 11 <130> FILE REFERENCE: 161 US UT01
 13 <140> CURRENT APPLICATION NUMBER: US 10/774,076A
 14 <141> CURRENT FILING DATE: 2004-02-06
 16 <150> PRIOR APPLICATION NUMBER: US 60/445,640
 17 <151> PRIOR FILING DATE: 2003-02-07
 19 <150> PRIOR APPLICATION NUMBER: US 60/533,901
 20 <151> PRIOR FILING DATE: 2003-12-30
 22 <160> NUMBER OF SEQ ID NOS: 39
 24 <170> SOFTWARE: PatentIn version 3.3
 26 <210> SEQ ID NO: 1
 27 <211> LENGTH: 252
 28 <212> TYPE: PRT
 29 <213> ORGANISM: Homo sapiens
 31 <400> SEQUENCE: 1
 33 Met Arg Ala Pro Leu Leu Pro Pro Ala Pro Val Val Leu Ser Leu Leu
 34 1 5 10 15
 37 Ile Leu Gly Ser Gly His Tyr Ala Ala Gly Leu Asp Leu Asn Asp Thr
 38 20 25 30
 41 Tyr Ser Gly Lys Arg Glu Pro Phe Ser Gly Asp His Ser Ala Asp Gly
 42 35 40 45
 45 Phe Glu Val Thr Ser Arg Ser Glu Met Ser Ser Gly Ser Glu Ile Ser
 46 50 55 60
 49 Pro Val Ser Glu Met Pro Ser Ser Ser Glu Pro Ser Ser Gly Ala Asp
 50 65 70 75 80
 53 Tyr Asp Tyr Ser Glu Glu Tyr Asp Asn Glu Pro Gln Ile Pro Gly Tyr
 54 85 90 95
 57 Ile Val Asp Asp Ser Val Arg Val Glu Gln Val Val Lys Pro Pro Gln
 58 100 105 110
 61 Asn Lys Thr Glu Ser Glu Asn Thr Ser Asp Lys Pro Lys Arg Lys Lys
 62 115 120 125
 65 Lys Gly Gly Lys Asn Gly Lys Asn Arg Arg Asn Arg Lys Lys Lys Asn
 66 130 135 140
 69 Pro Cys Asn Ala Glu Phe Gln Asn Phe Cys Ile His Gly Glu Cys Lys
 70 145 150 155 160
 73 Tyr Ile Glu His Leu Glu Ala Val Thr Cys Lys Cys Gln Gln Glu Tyr
 74 165 170 175
 77 Phe Gly Glu Arg Cys Gly Glu Lys Ser Met Lys Thr His Ser Met Ile

(pg. 6)

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78          180          185          190
81 Asp Ser Ser Leu Ser Lys Ile Ala Leu Ala Ala Ile Ala Ala Phe Met
82          195          200          205
85 Ser Ala Val Ile Leu Thr Ala Val Ala Val Ile Thr Val Gln Leu Arg
86          210          215          220
89 Arg Gln Tyr Val Arg Lys Tyr Glu Gly Glu Ala Glu Glu Arg Lys Lys
90 225          230          235          240
93 Leu Arg Gln Glu Asn Gly Asn Val His Ala Ile Ala
94          245          250
97 <210> SEQ ID NO: 2
98 <211> LENGTH: 119
99 <212> TYPE: PRT
100 <213> ORGANISM: Mus sp.
102 <400> SEQUENCE: 2
104 Glu Ile Gln Leu Gln Gln Ser Gly Pro Glu Leu Val Lys Pro Gly Ala
105 1          5          10          15
108 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Ala Phe Thr Asn Tyr
109          20          25          30
112 Asn Met Tyr Trp Val Lys Gln Ser His Gly Lys Ser Leu Glu Trp Ile
113          35          40          45
116 Gly Tyr Ile Asp Pro Tyr Tyr Gly Asp Pro Gly Tyr Ser Gln Lys Phe
117          50          55          60
120 Lys Gly Lys Ala Thr Leu Thr Val Asp Lys Ser Ser Ser Thr Ala Tyr
121 65          70          75          80
124 Met His Leu Asn Ser Leu Thr Ser Glu Asp Ser Ala Val Tyr Tyr Cys
125          85          90          95
128 Ala Arg Arg Gly Asn Phe Pro Tyr Tyr Phe Asp Tyr Trp Gly Gln Gly
129          100          105          110
132 Thr Thr Leu Thr Val Ser Ser
133          115
136 <210> SEQ ID NO: 3
137 <211> LENGTH: 107
138 <212> TYPE: PRT
139 <213> ORGANISM: Mus sp.
141 <400> SEQUENCE: 3
143 Asp Ile Lys Met Thr Gln Ser Pro Ser Ser Met Tyr Ala Ser Leu Gly
144 1          5          10          15
147 Glu Arg Val Thr Ile Thr Cys Lys Ala Ser Gln Asp Ile Asn Ser Tyr
148          20          25          30
151 Leu Ser Trp Phe Gln Gln Lys Pro Gly Lys Ser Pro Lys Thr Leu Ile
152          35          40          45
155 Tyr Arg Ala Asn Arg Leu Val Asp Gly Val Pro Ser Arg Phe Ser Gly
156          50          55          60
159 Ser Gly Ser Gly Gln Asp Tyr Ser Leu Thr Ile Ser Ser Leu Glu Tyr
160 65          70          75          80
163 Glu Asp Met Gly Ile Tyr Tyr Cys Leu Gln Tyr Asp Glu Phe Pro Tyr
164          85          90          95
167 Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys
168          100          105

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171 <210> SEQ ID NO: 4
172 <211> LENGTH: 116
173 <212> TYPE: PRT
174 <213> ORGANISM: Mus sp.
176 <400> SEQUENCE: 4
178 Glu Val Gln Leu Gln Gln Ser Gly Ala Glu Leu Val Arg Ser Gly Ala
179 1 5 10 15
182 Ser Val Lys Leu Ser Cys Thr Ala Ser Gly Phe Asn Ile Lys Asp Tyr
183 20 25 30
186 Tyr Ile His Trp Val Lys Gln Arg Pro Glu Gln Gly Leu Glu Trp Ile
187 35 40 45
190 Gly Cys Ile Asp Pro Glu Asn Gly Asp Thr Glu Tyr Ala Pro Asn Phe
191 50 55 60
194 Gln Gly Arg Ala Thr Met Thr Ala Asp Thr Ser Ser Asn Thr Ala Tyr
195 65 70 75 80
198 Leu Gln Leu Ser Ser Leu Thr Ser Glu Asp Thr Ala Val Tyr Tyr Cys
199 85 90 95
202 Tyr Gly Gly Thr Ile Thr Phe Ala Tyr Trp Gly Gln Gly Thr Leu Val
203 100 105 110
206 Thr Val Ser Ala
207 115
210 <210> SEQ ID NO: 5
211 <211> LENGTH: 110
212 <212> TYPE: PRT
213 <213> ORGANISM: Mus sp.
215 <400> SEQUENCE: 5
217 Gln Ala Val Val Thr Gln Glu Ser Ala Leu Thr Thr Ser Pro Gly Glu
218 1 5 10 15
221 Thr Val Thr Leu Thr Cys Arg Ser Ser Thr Gly Ala Val Thr Thr Ser
222 20 25 30
225 Asn Ser Ala Asn Trp Val Gln Glu Lys Pro Asp His Leu Phe Thr Gly
226 35 40 45
229 Leu Ile Gly Gly Thr Ile Asn Arg Val Pro Gly Val Pro Ala Arg Phe
230 50 55 60
233 Ser Gly Ser Leu Ile Gly Asp Lys Ala Ala Leu Thr Ile Thr Gly Ala
234 65 70 75 80
237 Gln Thr Glu Asp Glu Ala Ile Tyr Phe Cys Ala Leu Trp Tyr Ser Asn
238 85 90 95
241 His Trp Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly
242 100 105 110
245 <210> SEQ ID NO: 6
246 <211> LENGTH: 20
247 <212> TYPE: DNA
248 <213> ORGANISM: Artificial
250 <220> FEATURE:
251 <223> OTHER INFORMATION: oligonucleotide
253 <400> SEQUENCE: 6
254 gccagtggat agactgatgg
257 <210> SEQ ID NO: 7

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258 <211> LENGTH: 21
259 <212> TYPE: DNA
260 <213> ORGANISM: Artificial
262 <220> FEATURE:
263 <223> OTHER INFORMATION: oligonucleotide
265 <400> SEQUENCE: 7
266 gatggataca gttggtgcag c                               21
269 <210> SEQ ID NO: 8
270 <211> LENGTH: 414
271 <212> TYPE: DNA
272 <213> ORGANISM: Mus sp.
274 <400> SEQUENCE: 8
275 atggaatgga gatggatctt tctcttctctc ctgtcaggaa ctacaggtgt ccactctgag       60
277 atccagctgc agcagctctgg acctgagctg gtgaagcctg gggcttcagt gaaggtatcc       120
279 tgcaaggctt ctggttatgc attcactaac tacaacatgt actgggtgaa gcagagccat       180
281 ggaaagagcc ttgagtggat tggatatatt gatccttact atggtgatcc tggctacagc       240
283 cagaagttca agggcaaggc cacattgact gttgacaagt cctccagcac agcctacatg       300
285 catctcaaca gcctgacatc tgaggactct gcagtctatt actgtgcaag acggggtaac       360
287 ttcccgtaact actttgacta ctggggccaa ggcaccactc tcacagtctc ctca           414
290 <210> SEQ ID NO: 9
291 <211> LENGTH: 138
292 <212> TYPE: PRT
293 <213> ORGANISM: Mus sp.
295 <400> SEQUENCE: 9
297 Met Glu Trp Arg Trp Ile Phe Leu Phe Leu Leu Ser Gly Thr Thr Gly
298 1          5          10          15
301 Val His Ser Glu Ile Gln Leu Gln Ser Gly Pro Glu Leu Val Lys
302          20          25          30
305 Pro Gly Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Ala Phe
306          35          40          45
309 Thr Asn Tyr Asn Met Tyr Trp Val Lys Gln Ser His Gly Lys Ser Leu
310          50          55          60
313 Glu Trp Ile Gly Tyr Ile Asp Pro Tyr Tyr Gly Asp Pro Gly Tyr Ser
314 65          70          75          80
317 Gln Lys Phe Lys Gly Lys Ala Thr Leu Thr Val Asp Lys Ser Ser Ser
318          85          90          95
321 Thr Ala Tyr Met His Leu Asn Ser Leu Thr Ser Glu Asp Ser Ala Val
322          100         105         110
325 Tyr Tyr Cys Ala Arg Arg Gly Asn Phe Pro Tyr Tyr Phe Asp Tyr Trp
326          115         120         125
329 Gly Gln Gly Thr Thr Leu Thr Val Ser Ser
330          130         135
333 <210> SEQ ID NO: 10
334 <211> LENGTH: 381
335 <212> TYPE: DNA
336 <213> ORGANISM: Mus sp.
338 <400> SEQUENCE: 10
339 atgaggaccc ctgctcagtt tcttggaatc ttgttgctct ggtttccagg tatcaaatgt       60
341 gacatcaaga tgaccagtc tccatcttcc atgtatgcat ctctaggaga gagagtcact       120

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343 atcacttgca aggcgagtcg ggacattaat agctattttaa gctgggttcca gcagaaacca 180
345 gggaaatctc ctaagaccct gatctatcgt gcaaacagat tggtagatgg ggtcccatca 240
347 aggttcagtg gcagtggatc tgggcaagat tattctctca ccatcagcag cctggagtat 300
349 gaagatatgg gaatttatta ttgtctacag tatgatgagt ttccgtacac gttcggaggg 360
351 gggaccaagc tggaaataaa a 381

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354 <210> SEQ ID NO: 11

355 <211> LENGTH: 127

356 <212> TYPE: PRT

357 <213> ORGANISM: Mus sp.

359 <400> SEQUENCE: 11

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361 Met Arg Thr Pro Ala Gln Phe Leu Gly Ile Leu Leu Leu Trp Phe Pro
362 1 5 10 15
365 Gly Ile Lys Cys Asp Ile Lys Met Thr Gln Ser Pro Ser Ser Met Tyr
366 20 25 30
369 Ala Ser Leu Gly Glu Arg Val Thr Ile Thr Cys Lys Ala Ser Gln Asp
370 35 40 45
373 Ile Asn Ser Tyr Leu Ser Trp Phe Gln Gln Lys Pro Gly Lys Ser Pro
374 50 55 60
377 Lys Thr Leu Ile Tyr Arg Ala Asn Arg Leu Val Asp Gly Val Pro Ser
378 65 70 75 80
381 Arg Phe Ser Gly Ser Gly Ser Gly Gln Asp Tyr Ser Leu Thr Ile Ser
382 85 90 95
385 Ser Leu Glu Tyr Glu Asp Met Gly Ile Tyr Tyr Cys Leu Gln Tyr Asp
386 100 105 110
389 Glu Phe Pro Tyr Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys
390 115 120 125

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393 <210> SEQ ID NO: 12

394 <211> LENGTH: 119

395 <212> TYPE: PRT

396 <213> ORGANISM: Artificial

398 <220> FEATURE:

399 <223> OTHER INFORMATION: humanized antibody

401 <400> SEQUENCE: 12

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403 Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
404 1 5 10 15
407 Ser Val Lys Ile Ser Cys Lys Val Ser Gly Tyr Ala Phe Thr Asn Tyr
408 20 25 30
411 Asn Met Tyr Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Ile
412 35 40 45
415 Gly Tyr Ile Asp Pro Tyr Tyr Gly Asp Pro Gly Tyr Ser Gln Lys Phe
416 50 55 60
419 Lys Gly Lys Ala Thr Leu Thr Val Asp Lys Ser Thr Ser Thr Ala Tyr
420 65 70 75 80
423 Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
424 85 90 95
427 Ala Arg Arg Gly Asn Phe Pro Tyr Tyr Phe Asp Tyr Trp Gly Gln Gly
428 100 105 110
431 Thr Leu Val Thr Val Ser Ser
432 115

```

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/10/774,076A

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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:13; Xaa Pos. ~~31,32,33,34,35,50,51,52,53,54,55,56,57,58,59,60,61,62,63~~
Seq#:13; Xaa Pos. ~~64,65,66,99,100,101,102,103,104,105,106,107,108~~
Seq#:15; Xaa Pos. 24,25,26,27,28,29,30,31,32,33,34,50,51,52,53,54,55,56,89
Seq#:15; Xaa Pos. 90,91,92,93,94,95,96,97

Invalid <213> Response:

Use of "Artificial" only as "<213> Organism" response is incomplete,
per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#:6,7,12,14,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36
Seq#:37,38,39

VERIFICATION SUMMARY

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Input Set : A:\161USUT01.ST25.txt

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L:462 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13 after pos.:16

M:341 Repeated in SeqNo=13

L:555 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15 after pos.:16

M:341 Repeated in SeqNo=15